

IN THE CLAIMS:

Please cancel claim 1-33 and add the following claims.

1-33. (Cancelled)

34. (New) A method of manufacturing an optical waveguide device, comprising:

    bonding a first substrate having an optical waveguide region, and a second substrate having a functional region over almost a whole surface, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

    opposing at least a part of the functional region to an outside of the optical waveguide region of the first substrate; and

    removing an unnecessary part of the first substrate opposite to the functional region,

    wherein an uncured layer of a bonding resin is left between the first substrate and the second substrate in a region where the functional region is formed in bonding the first substrate and the second substrate, and the unnecessary part of the first substrate opposite to the functional region is removed by the uncured layer.

35. (New) The method according to claim 34, wherein the first substrate includes a plurality of optical waveguide regions and the second substrate includes a plurality of functional regions, the method further comprising separating the first substrate and the second substrate into individual optical waveguide devices having the

optical waveguide region and the functional region.

36. (New) A method of manufacturing an optical waveguide device, comprising:

    bonding a first substrate having an optical waveguide region, and a second substrate having a functional region over almost a whole surface, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

    opposing at least a part of the functional region to an outside of the optical waveguide region of the first substrate; and

    removing an unnecessary part of the first substrate opposite to the functional region,

    wherein a layer to facilitate removal of the unnecessary part is formed in the unnecessary part of the first substrate opposite to the functional region or the region of the second substrate opposite to the unnecessary part before bonding the first substrate and the second substrate, and the unnecessary part of the first substrate opposite to the functional region is removed by the layer.

37. (New) The method according to claim 36, wherein the first substrate has a plurality of optical waveguide regions and the second substrate has a plurality of functional regions, the method further comprising separating the first substrate and the second substrate into individual optical waveguide devices having the optical waveguide region and the functional region.

38. (New) The method according to claim 36, wherein a boundary between the region to be removed in the first substrate and the region to be left is cut off by dicing to remove the unnecessary part of the first substrate.

39. (New) The method according to claim 36, wherein a spacer is formed on at least one of the optical waveguide region of the first substrate and the functional region of the second substrate.

40. (New) The method according to claim 36, wherein the cladding layer is formed in a manner that a photo-curing resin applied onto the first substrate is pressed by a stamper to transfer a profile of a shape of the stamper thereto, and the core is formed to be in contact with the cladding layer

41. (New) The method according to claim 40, wherein a spacer is formed on at least one of the optical waveguide region of the first substrate and the functional region of the second substrate.

42. (New) The method according to claim 41, wherein the functional region and the spacer are formed in a same process when the spacer is formed on the second substrate.

43. (New) The method according to claim 41, wherein a top surface of the spacer formed

on the second substrate is in contact with the cladding layer in the bonding step.

44. (New) The method according to claim 36, wherein the functional region is an optical fiber guide.

45. (New) The method according to claim 36, wherein the functional region is an element mounting bench.

46. (New) The method according to claim 36, wherein the layer has low adhesive properties.

47. (New) The method according to claim 46, wherein the first substrate has a plurality of optical waveguide regions and the second substrate has a plurality of functional regions, the method further comprising separating the first substrate and the second substrate into individual optical waveguide devices having the optical waveguide region and the functional region.

48. (New) The method according to claim 46, wherein a boundary between the region to be removed in the first substrate and the region to be left is cut off by dicing to remove the unnecessary part of the first substrate.

49. (New) The method according to claim 46, wherein a spacer is formed on at least one of the optical waveguide region of the first substrate and the functional region of the

second substrate.

50. (New) The method according to claim 46, wherein the cladding layer is formed in a manner that a photo-curing resin applied onto the first substrate is pressed by a stamper to transfer a profile of a shape of the stamper thereto, and the core is formed to be in contact with the cladding layer

51. (New) The method according to claim 50, wherein a spacer is formed on at least one of the optical waveguide region of the first substrate and the functional region of the second substrate.

52. (New) The method according to claim 51, wherein the functional region and the spacer are formed in a same process when the spacer is formed on the second substrate.

53. (New) The method according to claim 51, wherein a top surface of the spacer formed on the second substrate is in contact with the cladding layer in the bonding step.

54. (New) The method according to claim 46, wherein the functional region is an optical fiber guide.

55. (New) The method according to claim 46, wherein the functional region is an element mounting bench.

56. (New) A method of manufacturing an optical waveguide device, comprising:

forming a first substrate by providing an optical waveguide region on a light transmitting substrate, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

bonding the first substrate to a second substrate, wherein the second substrate is a supporting substrate; and

removing the light transmitting substrate,

wherein a groove is formed in the first substrate so as to separate the core after removing the substrate which transmits the light, and a filter is inserted in the groove.

57. (New) A method of manufacturing an optical waveguide device, comprising:

forming a first substrate by providing an optical waveguide region on a light transmitting substrate, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

bonding the first substrate to a second substrate, wherein the second substrate is a supporting substrate and has a functional region so that at least a part of the functional region of the second substrate is opposed to an outside of the optical waveguide region in the first substrate;

removing the light transmitting substrate ; and

removing an unnecessary part of the first substrate opposite to the functional region of the second substrate,

wherein a groove is formed in the first substrate so as to separate the core after removing the substrate which transmits the light, and a filter is inserted in the groove.

58. (New) An optical waveguide device which is produced by a manufacturing method, wherein the method comprises:

bonding a first substrate having an optical waveguide region, and a second substrate having a functional region over almost a whole surface, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

opposing at least a part of the functional region to an outside of the optical waveguide region of the first substrate; and

removing an unnecessary part of the first substrate opposite to the functional region,

wherein a layer to facilitate removal of the unnecessary part is formed in the unnecessary part of the first substrate opposite to the functional region or the region of the second substrate opposite to the unnecessary part before bonding the first substrate and the second substrate, and the unnecessary part of the first substrate opposite to the functional region is removed by the layer.

59. (New) The optical waveguide device according to claim 58, wherein the layer has low adhesive properties.

60. (New) An optical waveguide device which is produced by a manufacturing method,

wherein the method comprises:

forming a first substrate by providing an optical waveguide region on a light transmitting substrate, wherein the optical waveguide region includes a core transmitting light and a cladding layer surrounding the core;

bonding the first substrate to a second substrate, wherein the second substrate is a supporting substrate; and

removing the light transmitting substrate,

wherein a groove is formed in the first substrate so as to separate the core after removing the substrate which transmits the light, and a filter is inserted in the groove.